

REMARKS

In an Office Action mailed April 29, 2005, pending claims 1-20 were examined. Claims 1-20 were rejected. In response, Applicants respectfully request reconsideration of the application in view of the remarks provided herein. Applicants request the reconsideration and allowance of claims 1-20.

Applicants are herein amending the specification to update the section on a related application which has now issued as U.S. patent 6,775,727. Applicants are also submitting with this response an Information Disclosure Statement citing all of the art made of record in that copending application, not already of record in this application. Applicants request consideration of the references contained therein and acknowledgement of such consideration.

Claims 1-5, 7-14, 16-18 and 20 were rejected under 35 U.S.C. 102(b) as being anticipated by Moyer (U.S. Patent 5,894,562). The rejection is improper because the '562 Moyer patent does not teach "determining that the access is an undefined length burst access". The '562 Moyer patent is readily distinguishable from the originally claimed subject matter and does not involve undefined length burst access having "an undefined number of access beats" as recited in claim 1. As illustrated in FIG. 6 of the specification, the recited burst accesses have differing numbers of clock cycles and are therefore of an undefined length. The '562 Moyer patent uses an arbitration block signal of fixed duration to prevent the interruption of inseparable sequences of data of known cycle count (Col. 6, lines 11-12). As stated

at line 11 of Col. 6 of the '562 Moyer patent, "Incorporation of timer 7 allows predetermined conditions of a known cycle count to process as timer 7 counts to a completion value."

In contrast, in the recited method of claim 1 bus arbitration is based on determining when a predetermined number of access beats of the undefined length burst access occurs. Because the burst access is of undefined length, the length of the beats may vary and are not known. In the claimed method claim 1, the timing is based on the transmission of access beats rather than the elapse of a predetermined time as in the '562 Moyer patent. In particular, claim 1 recites "determining that the predetermined number of access beats have occurred during the undefined length burst access". This is not the same or analogous to the counting in the '562 Moyer patent of a predetermined number of cycles. In particular, if a cycle count value is put into a timer as in the '562 Moyer patent for use in a system as recited in claim 1 of undefined length burst accesses, arbitration can begin and a bus interrupt occur prior to completion of a multiple cycle access beat and result in communication of a partial access beat.

Similarly, claim 7 is improperly rejected under 35 U.S.C. 102(b) as the '562 Moyer patent does not teach "an undefined length burst arbitration circuit" and does not determine "that an access to the slave device is an undefined length burst access". Additionally recited in claim 7 is the feature of "allowing arbitration of the slave device only after a predetermined time period during the undefined length burst access". The recited circuit permits arbitration during an undefined length burst access. The '562 Moyer patent keeps bus mastership to

complete a sequence of inseparable cycles (Col. 4, line 53). A timer count value is set to ensure the completion. In the circuit as recited in claim 7, bus arbitration is allowed during an undefined length burst access. The recited circuit of claim 7 does not require completion of an undefined length burst access and does not relate to inseparable sequences of data accesses of a known cycle count as disclosed in the '562 Moyer patent at Col. 4, line 53, Col. 6, lines 11-14 and elsewhere.

Claim 16 is improperly rejected under 35 U.S.C. 102(b) as the '562 Moyer patent does not teach "determining that the access is an undefined length burst". The '562 Moyer patent deals with the use of a timer to allow "predetermined conditions of a known cycle count to process as timer 7 counts to a completion value" (Col. 6, lines 11-13 and emphasis added). The '562 Moyer patent is unrelated to burst accesses of undefined lengths. Additionally, the '562 Moyer patent does not teach an "undefined length burst access comprises an undefined number of access beats" as recited in claim 16.

For the reasons above, the '562 Moyer patent is readily distinguishable from the bus arbitration method and structure recited in each of independent claims 1, 7 and 16 as originally filed. Applicants request the withdrawal of the rejection of claims 1-5, 7-14, 16-18 and 20 under 35 U.S.C. 102(b).

Claims 6, 15 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over the '562 Moyer patent as applied above and further in view of Goodwin et al. (U.S. Patent 6,353,876). While Goodwin et al. describe a system having a crossbar switch connected to an arbiter, Goodwin et al. does not detail any type of arbitration scheme for use


with the crossbar switch. Therefore, dependent claims 6, 15 and 19 are distinguishable from the combination of the '562 Moyer patent and the Goodwin et al. patent at least for the reasons stated above in connection with the rejection of the base claims on the basis of the '562 Moyer patent.

Applicants respectfully request the allowance of claims 1-20. Should issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned at (512) 996-6839.

SEND CORRESPONDENCE TO:

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